

# Connect America Fund in Puerto Rico

December 1, 2015  
WC Docket No. 10-90

**Javier Rúa Jovet**

Chairman, Telecommunications Regulatory Board of Puerto Rico

## Telecommunications Regulatory Board of Puerto Rico (PRTRB)

- Created by PR Law 213 of 1996; as per the Federal Telecommunications Act of 1996
- 5 members, responsible for telecom and cableTV
- **Statutory authority under Law 213 to “*promote the investment of capital in the development of telecommunications infrastructure*” and must ensure that “*advanced telecommunications services shall be available*” in all of the Island’s towns and communities, as well as schools, libraries and other community anchor institutions.**
- Administer **Universal Service Fund** (Lifeline/TRS/other)
- Cable TV/IP TV Franchising Authority
- Controversies & Interconnection Agreements between companies
- Consumer protection (telecom, cableTV & DBS billing, contractual and quality of service issues)
- Telecom ROWs/easements & connection points

# Availability By Speed

## Broadband Availability By Speed Among Fixed Platforms

Down / Up Speed	% Households Served			
	2011	2012	2013	2014
At Least 768 Kbps/200 Kbps	85.2%	85.8%	89.4%	90.9%
At Least 1.5 Mbps/200 Kbps	84.4%	85.0%	89.1%	90.8%
At Least 3 Mbps/768 Kbps	77.8%	85.0%	89.1%	90.8%
At Least 6 Mbps/1.5 Mbps	33.1%	56.4%	77.3%	79.7%
At Least 10 Mbps/1.5 Mbps	24.5%	49.0%	77.1%	77.9%
At Least 25 Mbps/1.5 Mbps		49.0%	77.1%	77.9%
At Least 50 Mbps/1.5 Mbps		24.3%	24.3%	76.9%
At Least 100 Mbps/1.5 Mbps		0.3%	0.3%	52.9%
At Least 1 Gbps/1.5 Mbps		0.0%	0.0%	0.0%



Source: Connect Puerto Rico, NTIA State Broadband Initiative grant data as of June 30 each year

# Availability by Platform

## Broadband Availability by Broadband Platform

Platform	% of Households Served at $\geq 3$ Mbps Down / 768 Kbps Up*			
	2011	2012	2013	2014
Cable	61.3	77.9	76.9	77.0
DSL	N/A	62.6	65.0	67.1
Fiber	0.0	0.3	0.3	0.1
Fixed Wireless	25.2	31.7	49.9	58.0
All Fixed Platform	56.9	85.0	89.1	90.9



Source: Connect Puerto Rico, NTIA State Broadband Initiative grant data as of June 30 each year

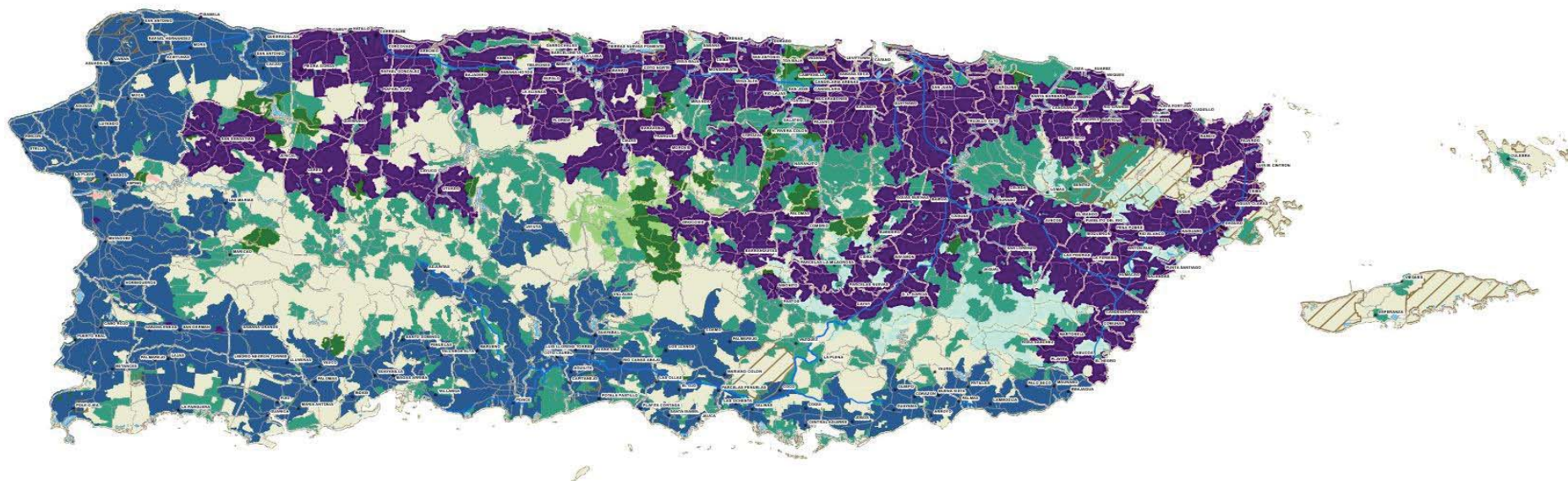
# Urban/Rural

## Broadband Availability Across Rural and Urban Households

	% of Households Served		
Down/Up Speed	RURAL	URBAN	ALL
At Least 3 Mbps/768 Kbps	85.20	99.99	90.77
At Least 6 Mbps/1.5 Mbps	68.13	99.65	79.73
At Least 10 Mbps/1.5 Mbps	65.96	98.87	77.87
At Least 25 Mbps/1.5 Mbps	65.95	98.87	77.87
At Least 50 Mbps/1.5 Mbps	64.84	98.60	76.90
At Least 100 Mbps/1.5 Mbps	36.29	81.18	52.90
At Least 1 Gbps/1.5 Mbps	-		

Source: Connect Puerto Rico inventory estimate as of June 30, 2014

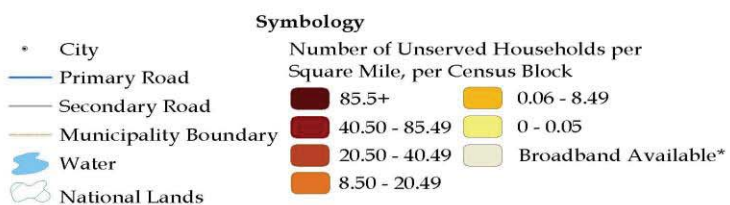
# Disparity in Download Speeds



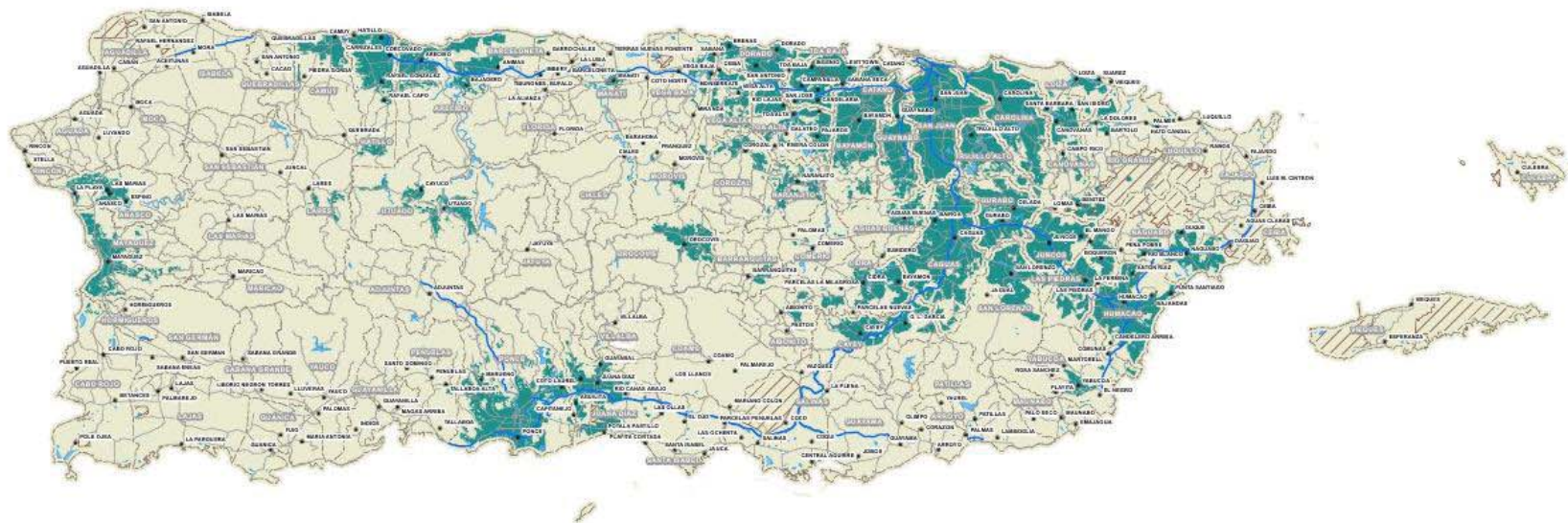
## Symbology

• City	Tier 10 (100 Mbps to < 1 Gbps)	Tier 5 (3 Mbps to < 6 Mbps)
— Primary Road	Tier 9 (50 Mbps to < 100 Mbps)	Tier 4 (1.5 Mbps to < 3 Mbps)
— Secondary Road	Tier 8 (25 Mbps to < 50 Mbps)	Tier 3 (768 kbps to < 1.5 Mbps)
— Municipality Boundary	Tier 7 (10 Mbps to < 25 Mbps)	Unserved Areas
Water	Tier 6 (6 Mbps to < 10 Mbps)	
National Lands		




# Unserved by 10 Mbps/1.5 Mbps



# Competitiveness



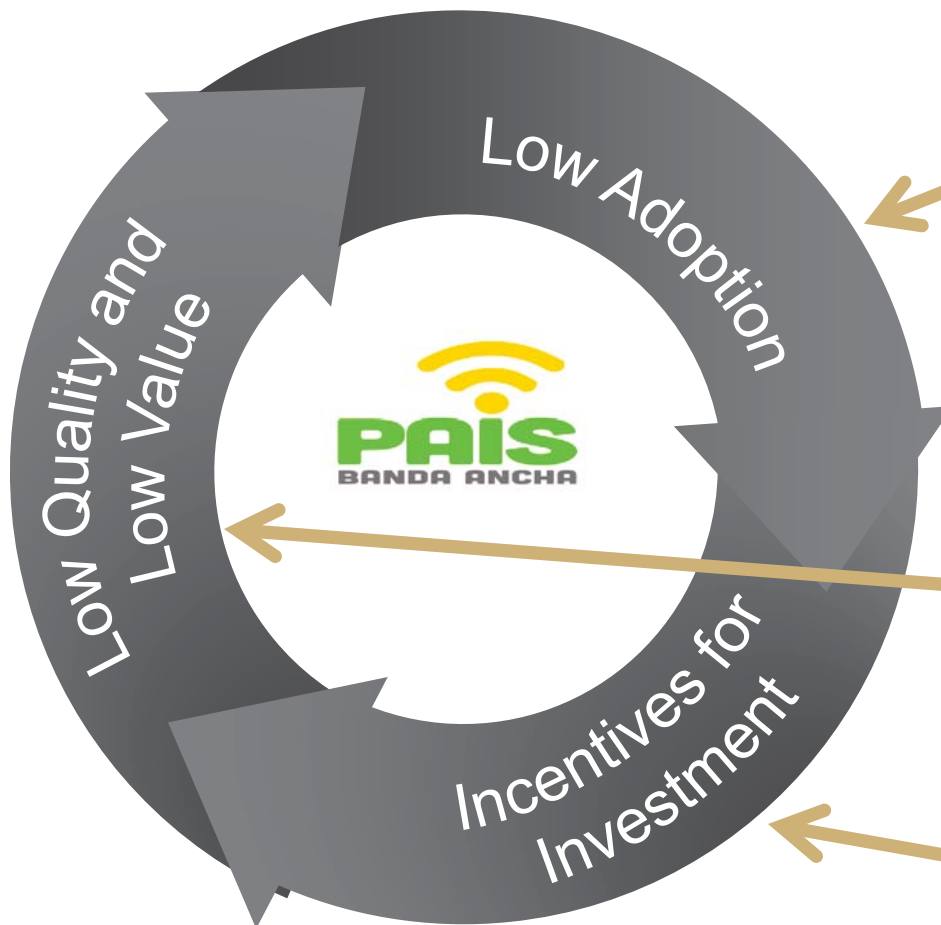
## Symbology

- \* City
- Primary Road
- Secondary Road
- - - Municipality Boundary
-  Water
-  National Lands
-  3 or More Providers

# Disconnected



# Reversing the Cycle



PAIS Banda Ancha  
PRTRB's Strategy:  
Planning  
Access/Adoption &  
Incentives  
Lifeline Modernization  
E-Rate

Aggressive Quality  
Benchmarks and  
Measurement Goals

Connect America Fund  
*ViaDIGITAL*: conduit  
and infrastructure  
policies

# Our Goals



PUERTO RICO  
BROADBAND STRATEGIC  
ASSESSMENT  
February 2015

- By 2018, 90% of Puerto Rico households will have broadband available at download speeds of 10 Mbps.
- By 2018, 50% of Puerto Rico households will have broadband available at download speeds of 1 Gbps.
- By 2020, 99% of Puerto Rico households will have broadband available at download speeds of 10 Mbps.
- By 2020, 70% of Puerto Rico households will have broadband available at download speeds of 1 Gbps.

# *Gigabit Island Recommendations*

- **Monitor, Measure, and Assess the Impact of Broadband on Puerto Rico's Economy**
  - Broadband Mapping, Measurement of Investment
  - Measure Aggregate Broadband Use
  - Estimate Impact of Broadband on Puerto Rico's Economy
- **Lower Cost of Broadband Build-Out**
  - Project ViaDIGITAL: leverage existing conduit and construct new conduit to encourage private providers to lease and deploy their fiber
  - Advance "Dig Once" legislation
- **Promote Public-Private Partnerships to Stimulate and Aggregate Local Demand and Expand Market Opportunities**
- **Leverage Federal Support for Broadband Expansion (CAF, Lifeline, E-rate)**
- **Stimulate Broadband Adoption to Encourage Further Investment**



# Tailoring CAF for Puerto Rico

*The “tailored” Connect America Fund program for Puerto Rico should work with and support the Puerto Rico Government’s Island-wide Broadband Goals*

1. CAF recipients should **meet the Gigabit Island deployment goals**. In particular...  
By 2018: 90% of locations with 10 Mbps and 50% with 1 Gbps  
By 2020: 99% with 10 Mbps and 70% with 1 Gbps
2. CAF recipients should use **Public Infrastructure** where available, and participate in public-private demand aggregation partnerships
3. CAF recipients should **support and connect digital inclusion efforts**, including offering high-speed access to community technology centers, Wi-Fi Town Squares, and training locations at rates, terms, and conditions consistent with the FCC’s E-rate rules for schools and libraries—as these institutions serve an important public access role in Puerto Rico
4. Collaboration: FCC and the Board should **jointly identify areas that qualify for support** and jointly monitor build-out, rates, and terms of service



## PRTRB ADOPTION INITIATIVES

**Free Wi-Fi Town Squares & Internet Centers:** PRTRB has installed Wi-Fi in 43 “municipal plazas” and 35 Internet Centers in certain municipalities as of October 2015

- PRTRB provides initial capital funding to construct Wi-Fi infrastructure
- Municipal government operates and maintains Wi-Fi facilities thereafter
- Free Internet access and use by people/communities in municipalities
- 49 municipalities already benefited by either or both type of facilities

**PRTRB and State Elections Commission** are establishing free Internet Centers throughout the 88 SEC Electoral Inscription Offices island-wide. The first 15 of these will open by December 31, 2015.



## PRTRB TRAINING INITIATIVES

**“TecnoAbuelos”** Training Program – PRTRB funds an island-wide community program where senior citizens are trained on how to access/use Internet services using computer and smart devices. A mobile Wi-Fi equipped unit is being used to run such Internet adoption program across all municipalities.

As of December 2015, 3,500 people have benefited from this project. In the coming months we expect to positively impact over 2,750 more.

**Si tienes 55 años o más y quieres aprender a usar los Teléfonos Inteligentes y las Tablet...**

**¡Este Curso es para ti!**

La Junta Reglamentadora de Telecomunicaciones de Puerto Rico te invita a aprender sobre las ventajas de navegar por internet, usar redes sociales y maximizar su uso. A través del curso introductorio de TecnoAbuelos, aprenderás de forma sencilla a usar y comunicarte a través de los teléfonos inteligentes y las tabletas. Comunícate con familiares y amigos, aprende a buscar información sobre noticias, salud, pasatiempos y mucho más. Explora, diviértete y mantén tu mente activa usando la tecnología.

**TecnoAbuelos.com**  
"Conectando generaciones"

Mayo 18-22	Mayo 26-27	Junio 2-10
• Utuado, mayo 18	• Barranquitas, mayo 26	• Vieques, junio 2
• Sabana Grande, mayo 20	• Orocoris, mayo 27	• Culebra, junio 3
• Cabo Rojo, mayo 20	• Moravia, mayo 27	• Coamo, junio 10
• Guánica, mayo 22		

**LLAMA AL 311 de lunes a viernes e INSCRIBETE GRATIS**

